

EPO -DG 1

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CLAIMS

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1. Device comprising a patch antenna (6), and coupling means for connecting the antenna to an electronic component (5), wherein the patch antenna is arranged on one side of an antenna plate (1), **characterized in that** the electronic component can be mounted on the other side of the antenna plate (1) and that the coupling means comprise a metal passage (2) through the antenna plate which transposes into a bond pad (8) against the antenna plate on the other side, and a metal bond wire (3) between the electronic component and the bond pad (8), wherein the length of the passage, as seen perpendicularly of the antenna plate, is smaller than a quarter-wavelength of a signal to be processed by the antenna.

2. Device as claimed in claim 1, **characterized in that** the length of the bond wire is smaller than a quarter-wavelength of a signal to be processed by the antenna.

3. Device as claimed in either of the foregoing claims, **characterized in that** an electrically conductive plate for the patch antenna is arranged against the antenna plate at the side of the electronic component, which electrically conductive plate is provided with a recess for the passage.

4. Device as claimed in any of the foregoing claims, **characterized in that** the electronic component is an amplifier, such as a low noise amplifier.

5. Device as claimed in any of the foregoing claims, **characterized in that** on the side of the electronic component the passage transposes into a bond pad for the bond wire.

6. Device as claimed in any of the foregoing claims, **characterized in that** the passage has a substantially cylindrical form.

7. Device as claimed in any of the foregoing claims,

characterized in that on the side of the antenna the passage makes direct contact with a power supply line of the patch antenna.

8. Device as claimed in claim 7, **characterized in that**
5 the periphery of the passage substantially corresponds with the width of the power supply line.

9. Radar receiver provided with a device as claimed in any of the foregoing claims.